

FORM
2A

Rev
08/13

State of Colorado
Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203
Phone: (303) 894-2100 Fax: (303) 894-2109



Document Number:

400557587

Date Received:

02/25/2014

Oil and Gas Location Assessment

New Location Refile Amend Existing Location Location#: 318779

Submit signed original form. This Oil and Gas Location Assessment is to be submitted to the COGCC for approval prior to any ground disturbance activity associated with oil and gas operations. Approval of this Oil and Gas Location Assessment will allow for the construction of the below specified Location; however, it does not supersede any land use rules applied by the local land use authority. Please see the COGCC website at <http://cogcc.state.co.us/> for all accompanying information pertinent this Oil and Gas Location Assessment.

Location ID:

318779

Expiration Date:

03/29/2017

This location assessment is included as part of a permit application.

CONSULTATION

- This location is included in a Comprehensive Drilling Plan. CDP # _____
- This location is in a sensitive wildlife habitat area.
- This location is in a wildlife restricted surface occupancy area.
- This location includes a Rule 306.d.(1)A.ii. variance request.

Operator

Operator Number: 47120
Name: KERR-MCGEE OIL & GAS ONSHORE LP
Address: P O BOX 173779
City: DENVER State: CO Zip: 80217-3779

Contact Information

Name: Cheryl Light
Phone: (720) 929-6461
Fax: (720) 929-7461
email: cheryl.light@anadarko.com

RECLAMATION FINANCIAL ASSURANCE

- Plugging and Abandonment Bond Surety ID: 20010124 Gas Facility Surety ID: _____
- Waste Management Surety ID: _____

LOCATION IDENTIFICATION

Name: HANSEN STATE Number: 1N-36HZ
County: WELD
Quarter: NWNW Section: 35 Township: 3N Range: 68W Meridian: 6 Ground Elevation: 4936

Define a single point as a location reference for the facility location. When the location is to be used as a well site then the point shall be a well location.

Footage at surface: 721 feet FNL from North or South section line
693 feet FWL from East or West section line
Latitude: 40.187735 Longitude: -104.977164
PDOP Reading: 2.3 Date of Measurement: 09/30/2013
Instrument Operator's Name: OWEN MCKEE

RELATED REMOTE LOCATIONS

(Enter as many Related Locations as necessary. Enter the Form 2A document # only if there is no established COGCC Location ID#)

This proposed Oil and Gas Location is:

LOCATION ID # **FORM 2A DOC #**

Well Site is served by Production Facilities

400558170

FACILITIES

Indicate the number of each type of oil and gas facility planned on location

| | | | | | | | | | |
|----------------------|---|---------------------|--|----------------------|--|-----------------|--|---|--|
| Wells | 3 | Oil Tanks | | Condensate Tanks | | Water Tanks | | Buried Produced Water Vaults | |
| Drilling Pits | | Production Pits | | Special Purpose Pits | | Multi-Well Pits | | Temporary Large Volume Above Ground Tanks | |
| Pump Jacks | 2 | Separators | | Injection Pumps | | Cavity Pumps | | | |
| Gas or Diesel Motors | | Electric Motors | | Electric Generators | | Fuel Tanks | | Gas Compressors | |
| Dehydrator Units | | Vapor Recovery Unit | | VOC Combustor | | Flare | | LACT Unit | |
| | | | | | | | | Pigging Station | |

OTHER FACILITIES

Other Facility Type

Number

| | |
|-------------------------|---|
| Flow lines | 6 |
| Temporary 500 bbl tanks | 2 |

Per Rule 303.b.(3)C, description of all oil, gas, and/or water pipelines:

Two 500 barrel skid-mounted frac tanks will be temporarily placed on-site for use of the pre-spud rig only. One tank will store water and the other will store water based mud.
Please see comments section for flow line description.

CONSTRUCTION

Date planned to commence construction: 07/01/2014 Size of disturbed area during construction in acres: 10.00

Estimated date that interim reclamation will begin: 10/01/2014 Size of location after interim reclamation in acres: 0.50

Estimated post-construction ground elevation: 4936

DRILLING PROGRAM

Will a closed loop system be used for drilling fluids: Yes

Is H₂S anticipated? No

Will salt sections be encountered during drilling: No

Will salt based mud (>15,000 ppm Cl) be used? No

Will oil based drilling fluids be used? Yes

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE Drilling Fluids Disposal Method: Commercial Disposal

Cutting Disposal: OFFSITE Cuttings Disposal Method: Commercial Disposal

Other Disposal Description:

Please see Comments section. Disposal description will not fit in space provided.

Beneficial reuse or land application plan submitted? Yes

Reuse Facility ID: _____ or Document Number: _____

Centralized E&P Waste Management Facility ID, if applicable: 149021

SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: Rose C. Hansen

Phone: 303-437-3792

Address: Living Trust

Fax: _____

Address: 6625 CR 5

Email: _____

City: Longmont State: CO Zip: 80504

Surface Owner: Fee State Federal Indian

Check all that apply. The Surface Owner: is the mineral owner

is committed to an oil and Gas Lease

has signed the Oil and Gas Lease

is the applicant

The Mineral Owner beneath this Oil and Gas Location is: Fee State Federal Indian

The Minerals beneath this Oil and Gas Location will be developed from or produced to this Oil and Gas Location: Yes

The right to construct this Oil and Gas Location is granted by: oil and gas lease

Surface damage assurance if no agreement is in place: _____ Surface Surety ID: _____

Date of Rule 306 surface owner consultation 09/17/2013

CURRENT AND FUTURE LAND USE

Current Land Use (Check all that apply):

Crop Land: Irrigated Dry land Improved Pasture Hay Meadow CRP

Non-Crop Land: Rangeland Timber Recreational Other (describe): _____

Subdivided: Industrial Commercial Residential

Future Land Use (Check all that apply):

Crop Land: Irrigated Dry land Improved Pasture Hay Meadow CRP

Non-Crop Land: Rangeland Timber Recreational Other (describe): _____

Subdivided: Industrial Commercial Residential

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 1725 Feet
Building Unit: 1725 Feet
High Occupancy Building Unit: 5218 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 689 Feet
Above Ground Utility: 613 Feet
Railroad: 5280 Feet
Property Line: 613 Feet

INSTRUCTIONS:

- All measurements shall be provided from center of nearest Well or edge of nearest Production Facility to nearest of each cultural feature as described in Rule 303.b.(3)A.
- Enter 5280 for distance greater than 1 mile.
- Building - nearest building of any type. If nearest Building is a Building Unit, enter same distance for both.
- Building Unit, High Occupancy Building Unit, and Designated Outside Activity Area - as defined in 100-Series Rules.

DESIGNATED SETBACK LOCATION INFORMATION

Check all that apply. This location is within a: Buffer Zone
 Exception Zone
 Urban Mitigation Area

- Buffer Zone - as described in Rule 604.a.(2), within 1,000' of a Building Unit.
- Exception Zone - as described in Rule 604.a.(1), within 500' of a Building Unit.
- Urban Mitigation Area - as defined in 100-Series Rules.

Pre-application Notifications (required if location is within 1,000 feet of a building unit):

Date of Rule 305.a.(1) Urban Mitigation Area Notification to Local Government: _____

Date of Rule 305.a.(2) Buffer Zone Notification to Building Unit Owners: _____

SOIL

List all soil map units that occur within the proposed location. attach the National Resource Conservation Service (NRCS) report showing the "Map Unit Description" report listing the soil typical vertical profile. This data is to used when segregating topsoil.

The required information can be obtained from the NRCS web site at <http://soildatamart.nrcs.usda.org/> or from the COGCC web site GIS Online map page found at <http://colorado.gov/cogcc>. Instructions are provided within the COGCC web site help section.

NRCS Map Unit Name: 82 WILEY-COLBY COMPLEX, 1 TO 3 PERCENT SLOPES

NRCS Map Unit Name: _____

NRCS Map Unit Name: _____

PLANT COMMUNITY:

Complete this section only if any portion of the disturbed area of the location's current land use is on non-crop land.

Are noxious weeds present: Yes No

Plant species from: NRCS or, field observation Date of observation: _____

List individual species: _____

Check all plant communities that exist in the disturbed area.

- Disturbed Grassland (Cactus, Yucca, Cheatgrass, Rye)
 Native Grassland (Bluestem, Grama, Wheatgrass, Buffalograss, Fescue, Oatgrass, Brome)
 Shrub Land (Mahogany, Oak, Sage, Serviceberry, Chokecherry)
 Plains Riparian (Cottonwood, Willow, Aspen, Maple, Poplar, Russian Olive, Tamarisk)
 Mountain Riparian (Cottonwood, Willow, Blue Spruce)
 Forest Land (Spruce, Fir, Ponderosa Pine, Lodgepole Pine, Juniper, Pinyon, Aspen)
 Wetlands Aquatic (Bullrush, Sedge, Cattail, Arrowhead)
 Alpine (above timberline)
 Other (describe): _____

WATER RESOURCES

Is this a sensitive area: No Yes

Distance to nearest

downgradient surface water feature: 173 Feet

water well: 1325 Feet

Estimated depth to ground water at Oil and Gas Location 119 Feet

Basis for depth to groundwater and sensitive area determination:

Sensitive area determination: Surface water feature within 1000'.

Basis for depth to groundwater: Identified water well (Permit # 27081) located approximately 4660' south of the proposed oil and gas location. Depth to groundwater at water well is 8' and the water well is at an elevation of approximately 4825'.

Is the location in a riparian area: No Yes

Was an Army Corps of Engineers Section 404 permit filed No Yes If yes attach permit.

Is the location within a Rule 317B Surface Water Supply Area buffer No
zone:

If the location is within a Rule 317B Surface Water Supply Area buffer have all public water supply systems within 15 miles been notified: _____

GROUNDWATER BASELINE SAMPLING AND MONITORING AND WATER WELL SAMPLING

Water well sampling required per Rule 318A

DESIGNATED SETBACK LOCATION EXCEPTIONS

Check all that apply:

- Rule 604.a.(1)A. Exception Zone (within 500' of Building Unit)
- Rule 604.b.(1)A. Exception Location (existing or approved Oil & Gas Location now within a Designated Setback as a result of Rule 604.a.)
- Rule 604.b.(1)B. Exception Location (existing or approved Oil & Gas Location is within a Designated Setback due to Building Unit construction after Location approval)
- Rule 604.b.(2) Exception Location (SUA or site-specific development plan executed on or before August 1, 2013)
- Rule 604.b.(3) Exception Location (Building Units constructed after August 1, 2013 within setback per an SUA or site-specific development plan)

RULE 502.b VARIANCE REQUEST

- Rule 502.b. Variance Request from COGCC Rule or Spacing Order Number _____

ALL exceptions and variances require attached Request Letter(s). Refer to applicable rule for additional required attachments (e.g. waivers, certifications, SUAs).

OPERATOR COMMENTS AND SUBMITTAL

Comments

Disposal Description:
 Drilling fluids disposal: Water-based drilling fluids will be used to drill the curve of the well. KMG will reuse water-based drilling fluids to the maximum extent at which point they will either be land applied or taken to a licensed, commercial disposal site; decided upon based off of laboratory analysis of fluids.
 Oil-based drilling fluids will be used to drill the lateral of the well. KMG will reuse oil-based drilling fluids to maximum extent at which point they will be returned to the fluids manufacturer for re-conditioning or disposal at a licensed, commercial disposal site.
 Cuttings disposal: Water based cuttings will be used to drill the curve of the well. If the surface owner authorizes, and if it is feasible for this location at the time of drilling, water-based cuttings will be disposed of onsite using bioremediation/solidification product.
 If the surface owner does not authorize onsite disposal and/or it is not feasible for this location at the time of drilling, water-based cuttings will be disposed of using a Centralized E&P Waste Management facility or a private spread field.
 Oil based cuttings will be used to drill the lateral of the well. They will be disposed of offsite and at a licensed, commercial disposal site.

Flow Lines: Six additional flow lines will flow to the production facility location. During production, flow direction in the flow lines is from the well head to the production facility. The size of flow lines is typically 2". Flow lines will be constructed from steel pipe, buried, and will equal the distance between the well heads and the tank battery, approximately 2,500'.
 Six additional fuel gas supply lines will also be installed from the well head to the production facility. During operation flow direction in the supply lines will be from the production facility to the well head. The size of the supply lines is typically 1". Supply lines will be constructed from poly or steel pipe, buried, and will equal the distance between the well heads and the tank battery, approximately 2,500'.
 Gas lift lines are also occasionally installed (one per well) from the well head to the production facility. During operation flow direction in the gas lift lines will be from the production facility to the well head. The size of the gas lift lines is typically 2". Gas lift lines will be constructed from steel pipe, buried, and will equal the distance between the well heads and the tank battery, approximately 2,500'.

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.

Signed: _____ Date: 02/25/2014 Email: DJRegulatory@anadarko.com

Print Name: Lauren Kucera Title: Regulatory Analyst II

Based on the information provided herein, this Application for Permit-to-Drill complies with COGCC Rules and applicable orders and is hereby approved.

COGCC Approved:  Director of COGCC Date: 3/30/2014

Conditions Of Approval

All representations, stipulations and conditions of approval stated in this Form 2A for this location shall constitute representations, stipulations and conditions of approval for any and all subsequent operations on the location unless this Form 2A is modified by Sundry Notice, Form 4 or an Amended Form 2A.

| <u>COA Type</u> | <u>Description</u> |
|-----------------|--------------------|
| | |

Best Management Practices

| <u>No</u> | <u>BMP/COA Type</u> | <u>Description</u> |
|-----------|---------------------|---|
| 1 | Planning | The nearest building unit is located 1,725' away from this oil and gas location, therefore it is not within a Designated Setback Location and is exempt from 604.c. |
| 2 | Construction | NEED WATER BMP ONCE RECEIVE UPDATED HYDRO |

Total: 2 comment(s)

Attachment Check List

| <u>Att Doc Num</u> | <u>Name</u> |
|--------------------|-----------------------|
| 400557587 | FORM 2A SUBMITTED |
| 400557631 | NRCS MAP UNIT DESC |
| 400557633 | LOCATION PICTURES |
| 400557637 | HYDROLOGY MAP |
| 400557638 | ACCESS ROAD MAP |
| 400557639 | MULTI-WELL PLAN |
| 400557640 | WELL LOCATION PLAT |
| 400557641 | LOCATION DRAWING |
| 400557642 | WASTE MANAGEMENT PLAN |

Total Attach: 9 Files

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|-------------------|---|--------------------------|
| Permit | Final Review Completed. No LGD or public comment received. | 3/26/2014 9:28:51 AM |
| OGLA | Facilities shown in the Location Pictures shall be removed per KM 3/6/2014. Review completed. | 3/10/2014 11:00:28 AM |
| OGLA | Requesting confirmation of facilities shown on the Location Drawing and Location Pictures. | 3/5/2014 1:42:04 PM |
| Permit | ok to pass. | 3/3/2014 1:40:45 PM |
| Permit | Passed completeness. | 2/25/2014 1:48:27 PM |

Total: 5 comment(s)